Water Quality Standards Advisory Committee
Meeting Minutes

March 11, 2003

Members Present:

William Beckwith	US Environmental Protection Agency
Wendell Berry	NH Lakes Association
Steve Clifton	Consulting Engineers of NH
Ben Frost	NH Office of State Planning
Donna Hanscom	NH Water Pollution Control Association
John Hodsdon	NH Farm Bureau
Vernon Lang	US Fish and Wildlife Service
David Miller	NH Water Works Association
Eileen Miller	NH Association of Conservation Districts
Peter Rice	NH Municipal Association
Marjory Swope	NH Association of Conservation Commission

Members Absent:

Michael Donahue	Business and Industry Association of NH
John Dreisig	NH Public Health – Risk Assessment
Tim Fortier	NH Travel Council
Nancy Girard	Conservation Law Foundation
Ken Kimball	Appalachian Mountain Club
Bill McDowell	University of New Hampshire
Carl Paulsen	NH Rivers Council
Jasen Stock	NH Timberland Owners Association

Others Present:

Philip H. Bilodeau	City of Concord
William Daly	Salem Water Works
William Heinz	Granite State Hydropower Association
Ronald Rayner	Environmental consultant/BIA member
William Schroeder	Canobie Lake Protective Association
Anthony Zuena	SEA Consultants, Inc.

DES Staff Present:

Paul Currier	Admr., Watershed Management Bureau
Bob Estabrook	Watershed Management Bureau
Marie LosKamp	Exec. Secretary, Watershed Management Bureau
George Berlandi	Wastewater Engineering Bureau

Introductions/December 17, 2002 Minutes

Marjory Swope, Chairperson, called the meeting to order, began with introductions, and then requested the committee's approval of the 12/17/02 minutes:

The following changes were requested to be made to the 12/17/02 minutes:

1. ***Change header to reflect correct date***
2. ***Correct spelling of Anthony Zuena's last name on pages 6 and 7.***
3. ***Page 2 – 1st Question was <u>not</u> made by David Miller, please delete his name. Question was asked by Allan Palmer.***

Steve Clifton moved to accept the minutes of December 17, 2002 as corrected John Hodsdon seconded the motion and the vote was unanimous.

Water Transfers - Overview by Paul Currier

The revision date is wrong on handout, it should be February 18, 2003. It has been revised since you saw it last but not substantially. The situation is that we are proposing to revise the rules by deleting the Env-Ws 1708.12 Transfer of Water to Public Water Supplies and modifying the Env-Ws 1703.14 Nutrients as shown. The modifications would remove the requirement that Class A waters contain no phosphorus or nitrogen unless naturally occurring and would remove the prohibition against new or increased discharge(s) containing phosphorus or nitrogen into lakes or ponds for water transfers. This is a change from the last time you saw it. The last time we had deleted that line, but based on internal discussions, the proposal now is Env-Ws 1703.14 (d). Except for water transfers, there shall be no new or increased point source discharge of phosphorus into lakes or ponds. Those would be the rule changes that we propose to go forward with, depending on outcome of this meeting, fairly soon. Associated auxiliary issues are antidegradation review, which we will talk about later, and also the need for NPDES permits for new and existing water transfers at some point in the future.

Question: Vernon - would you delete 1708.12 entirely? **Answer:** Paul - yes.

Question: Vernon – You have another section in here dealing with (subpart (c)) exotics, disease and organisms, and things of that nature, would this then be deleted also? **Answer:** Paul – This would be dealt with under antidegradation review for water transfers. The idea of deleting transfer of water to public water supplies is that public water supplies are not a separate category relative to the water quality standards issues surrounding water transfer. The proposal is to deal specifically with the nutrient issue by modifying the nutrient section and then to deal with all other issues in the enhanced antidegradation review process. Where there is an exotics issue that would be dealt with in antidegradation review. Where there is an issue for any other constituent having to do with the water quality standards that would also be dealt with under the antidegradation provisions.

Question: Vernon – Are you proposing to delete subpart (a) Class A waters? I am curious as to why you felt it was necessary to do that when it says in here that you would have to have a change of legislation to change a classification from A to B and that also is required right? **Answer:** Right. Basically since we define discharge as both point source and nonpoint source. Nonpoint source discharges come under the definition of discharge. We have a number of watersheds in the state where there is human activity that generates nonpoint source discharges of phosphorus to some level to violate that. There really is no fix for that. A developed watershed in fact does produce more phosphorus; there are a lot of studies out there that show that there are export coefficients from developed land for phosphorus to waterbodies that are greater than export coefficients measured for undisturbed natural forest landscapes. Lots of watersheds violate that. This is an unattainable standard given the current data development.

Question: Anthony Zuena – Relative to legislation to essentially downgrade, obviously I am thinking of Canobie Lake, my question here, which I see it as a very difficult thing to do, there is an emotional issue attached to that, the Lake Association in particular and the Town of Salem being an emotional question of why would we want to downgrade Canobie Lake? Because of the perception of that, why couldn't the reverse be argued that in this particular instance Arlington Pond, which is now a public water supply, be reclassified to "A"? **Answer:** Paul – There are other places in the Water Quality Standards where the standard is limited to naturally occurring for Class A and I believe that unless we were to change the standards to eliminate the natural occurring provisions for those parameters, you basically cannot do a transfer to a Class A waterbody because it is limited to naturally occurring and naturally occurring means that it didn't come from somewhere else through a pipe.

Comment: William Beckwith – I was going to suggest on that very point, the definition of naturally occurring. **Answer:** Paul – There is no definition of naturally occurring.

Question: William Beckwith – Does it mean in the absence of waste discharges, point source discharges, allowing for nonpoint source discharges, or does it mean in the absence of all human activity? **Answer:** Paul – We do not have a concise definition, but the definition that is most commonly applied is *in the absence of human activity*. Naturally occurring means the condition that could be obtained without human activity. The example that sticks in my mind is when Connecticut did the Long Island Sound TMDL. They did an extensive model, which took more than a decade, but they basically modeled the landscape, in this case nitrogen transport from the landscape without people, pre-Columbian and they called that naturally occurring.

Comment: George Berlandi - the Water Quality Standards do define naturally occurring pretty much as Paul stated.

Comment: William Beckwith - I thought it was in the absence of point source, but allowed nonpoint source contribution as we spoke about today. **Paul** – George is right, and I stand corrected, there is a definition in the standards, i.e. *Naturally occurring conditions means conditions which exist in the absence of human influences.*

Comment: Peter Rice - Maybe I am missing the point, but it seems like the thrust of this was to deal with the transfer of water. Not so much to deal with nonpoint source issues. **Answer:** Paul – right.

Comment: Peter – By eliminating this line (a), you are really incorporating a topic that is not necessarily intended to be incorporated in this instance. I notice that you are acknowledging the development around Class A waters does impact, and isn't that a land use issue, and zoning and subsurface approval issue more so than this transfer issue. Wouldn't it be more appropriate to say create a Class A water supply instead of eliminating the Class A. Differentiate Class A waterbodies that are used for water supplies and make that special. **Answer:** Paul – Anything that is in the standards, we can change and anything that is in the law we cannot change. The legislature has to do that. The Class A's and Class B's are defined in the statute.

Comment: Peter – Right but if you put something like with the exception of public water supplies, Class A shall somewhat retain. **Answer:** Paul – Two things, and this is an opinion, but the Class A's and Class B's are basically historical in nature. All of the New England states have them in some version or another. It comes from the Pre-Clean Water Act. Not overly useful now. The historical purpose for Class A watersheds was to allow greater protection to some waterbodies and watersheds for the purpose of public water supply. That was done back when most public water supplies were treated with only chlorination. The purpose of a Class A designation was to make sure that you didn't have point sources in it and to make sure that there were not other things that were created by human activity that would degrade the water so it would be less suitable for public water supply given that the only treatment was chlorination.

Comment: Peter – I go back to this issue of downgrading this from the information presented at prior meeting where there are 11 non-regulated public water supply transfers occurring right now. If the logic were to follow, they would all have to go to a process of gaining NPDES permits so we would be looking at 11 or so downgrading of Class A waterbodies. This strikes me that this is not a solution to this problem. **Answer:** Paul – I would take the opposite point of view. The decision of whether a waterbody should be Class A or not, first of all the legislature gets to do it, and it really is one that probably ought to be entered in the public/political forum. The issue is one of do you want this transfer or not and in the context of what do we want this waterbody to be and to do. I think a legislative forum is appropriate. Pennichuck when they put their transfer from the Merrimack went to legislature and got their ponds reclassified to Class B. I think the legislative task would be for the proponent of water transfer to build a case for it and to present it in a legislative forum just as a proponent of a reclassification to a Class A, which has happened in the past.

Comment: Bill Schroeder – I would agree with that point. I think that if lakes had been classified as Class A by act of legislature, there is a statement there about the quality, the desire for the lake, and for it to be changed I think it ought to be an equally public process that takes everybody's point of view on whether it should happen or not.

Comment: Tony Zuena – On the same point. There is an existing circumstance in the state were 11 or so inappropriate transfers (historic) are occurring at the moment. If those transfers are to continue, if I understand the proposal, all of them would have to be downgraded to Class B. Assuming that initiative, legislatively, was unsuccessful would the State of New Hampshire step in and terminate those transfers? **Answer:** Paul – That would be the eventual result. Yes, there would have to be a reclassification and the subsequent NPDES permit issued. Again, nobody is pushing NPDES permits for those transfers, but ultimately it has to happen. They would have to be permitted because that is what the courts have said has to happen. We have to certify the permit, so they do have to comply with Water Quality Standards.

Question: Marjory Swope – Are the actual waterbodies that are Class A listed in the statute? **Answer:** Paul – No, most of it is chapter law. It is legislation and we have actually gone through a review of all chapter law that we could find. The legislature has not been consistent over the 150 years they have doing this. Sometimes they classify watershed, sometimes just the lakes, sometimes part of the water, it varies and we have it all catalogued on GIS and it is available.

Question: Ron Rayner – I take it this basically came about as a result of Loon Mountain decision. We kind of broke some new ground here in New Hampshire. **Answer:** Paul – We have been ignoring the Loon Mountain decision as long as we can.

Comment: Ron Rayner – We are kind of precedent setting here, and since basically the rest of the country will have to follow suit. Rather than us perhaps initiating a lead and kind of breaking off some granite off the Notch, lets elevate the question one level up and say what is EPA going to do on a national scale? What are they going to do on a Region 1 scale to deal with this? Why should we perhaps do this piece meal when perhaps if we could do it uniformly in all the New England states, it may go a lot better off in the legislature. Their seeing that hey we are not breaking new ground here. We don't have to deal with the far right, and we are going to do the same as Mass. and Conn. and we are all in the same boat just at different points in the origin, how is this being dealt with regionally? **Answer:** William Beckwith – This is not necessarily a regional problem or a federal problem from the origin of the issue. There is nothing in the federal statute or regulation that creates a Class A that has certain universal characteristics. In fact most Class A's tend to be associated with water supplies. In some states, and I think it is accurate in New Hampshire, probably to a large degree Class A was associated with water supply. Some of the states for logistics had explicitly associated with a higher level of life protection and not necessarily the highest. Maine has classes above "A". So there are things you can generally, probably presume about Class A, but each state's Class A is probably inherently a little bit different. Whether discharges are prohibited in Class A regardless of how stringent the use is, the criteria assigned to Class A is yet another issue.

Comment: Paul – The issue of NPDES permits on a regional level. **Answer:** William Beckwith – NPDES permits to any water that state allows discharges to. States do not universally have outright prohibitions of discharges to Class A water. **Paul –** In the region, are there other states where water transfers have NPDES permits now? **William –** That I don't know the answer to. I don't know what is going on as far as the world of water transfer in general and what is being permitted. As you know the Loon thing was somewhat ground breaking. I wouldn't say with regard to establishing what smart money was said was required but for work load reasons, etc., certainly forced us to accept something that we may have tried to avoid in the past in regard to a class of discharge that you are now looking at from a permitting standpoint. I don't have a good picture on that. Most of what you are doing here may set an example that other people might look at for different situations. It is not necessarily precedent setting for the region or the country. Now having said that, federal water quality standards

regulations are concerned with what goes on here and how it is done right. I would agree that it is getting into more than addressing what you perceive as your problem of not being able to allow these transfers. **Paul –** I think the practicalities are that Salem has a need to find out what the process is and that basically this is driving the timetable. Were it not that we have a proposal for a transfer, for a new one, which has led to the realization that we have a number of ongoing ones that are also prohibitive basically by the rules, and not permitted as required by the Courts, that is driving the timetable.

Comment – I can appreciate that but having worked in Connecticut, there are some of these that are existing in Connecticut today. So I know from a conceptual standpoint, we are not the only state in this region that has this same issue. So, why should we be the first one out of the race so to speak and set some precedent setting ground again. Why not is there a happy medium to come up with an interim solution, admittedly there is a rule on the table that this is not allowed, we need to do something, but in a compromise approach rather than asking legislature to bite the bullet on 11 different waterbodies. **Answer:** William Beckwith – I am not saying there aren't other situations with regard to transfers to Class A with issues of what discharges are allowed. I am saying that is not established in federal law or regulations and what happens here, those classes and all, there is room for a lot of different standards from state to state, there are similarities, yes, but there are also some differences. So, this is really state, with something they feel they need to fix in their state standards. It is not a federal initiative to deal with what the state says or doesn't say about its Class A waters and then again, like everything else, how from a permanent limitations stand point, certain regulations are upheld and actual limitations are all together another issue. So what is going on in Connecticut is actually consistent or not consistent with their standard as written. I don't view this as something the feds are going to drive with regard to doing something or not doing something.

Question: Marjory Swope – Do you have some suggestions of how to do it? **Answer:** William Beckwith – When you talk about changing or reclassifying watersheds, I think you have problems. Whether it was for water supply purposes or whether it was explicitly for aquatic life, you have got more stringent criteria in certain instances such as dissolved oxygen. In your Class A and Class B you are going to be looking at a whole lot of things that you won't probably be able to show for any given water that need to be changed in conjunction with your explicit mission. To lower these classifications you will have to use an analysis and that analysis is going to have to support that the provisions in Class A and the following use and the criteria assigned to it are not obtainable. You are going to have instances where you need to pump some water into certain waters and it isn't going to be associated with any DO problem. It is going to be hard to lower protection for aquatic life, for example, because you want to supply water to deal with the water supply use. There are things to think through here.

Comment: Paul – We would probably argue that a use attainability analysis is not necessary, but that is a separate discussion. The DO standards for both Class A and B is fully protective of aquatic life. **Answer:** William – Yes, but there are subcategories of use in federal as defined by the federal regs. if you are going from a use designation that requires more stringent criteria than one that requires less stringent that triggers a use attainability analysis.

Question: Wendell Berry – Has DES considered and talked about the fact that this practically takes over what was a science based process to determine the standard or classification and now you have two different ways of determining classification, one based on science and one based on use. Do we want to set that trend? **Answer:** Paul – I am not sure that the classification system we have now is science based. A science-based process would be to evaluate the uses that you want to support in the case of DO, the biology that you want to support, the aquatic life and then set standards that support that aquatic life. I don't believe that has never been done in New Hampshire. We have never said we want certain waters to have this fish population. The legislature determines what is Class A and what's Class B and has determined that over a period of time for the last 100 years.

Comment: William Beckwith – You had B which was probably the goal for all waters and how the parameters were assigned to them by use class. Water supplies probably were largely but mainly not solely waters that were water supplies were assigned A, and then waters that couldn't attain B quality were put into C. **Comment:** Paul – Class C doesn't exist any more. If you look at the statutory language, I don't have it with me, the differences between A and B one says public drinking water supply after adequate treatment which is B, and one that may say something different. The aquatic life use words in the statute are the same for A and B. The statute does not differentiate aquatic life use support language wise between A and B. It does make a differentiation relative to the drinking water use for level of treatment necessary.

Question: Bill Schroeder – On this you have invited comments and discussion on changing these rules and it is the second time we have discussed it. What is the process going for to actually change the rules? At some point do you decide that there has been enough discussion and you are going to move forward to something? **Answer:** Paul – The next step, which we would look to do over the next couple of months, would be that we would make a formal proposal for rule change and that proposal goes to the Office of Legislative Services, the Joint Legislative Committee on Administrative Rules, and that starts a process in which we submit them to the committee with a financial impact statement. We set a date for public hearing, we hold a public hearing, an agency public hearing in which we receive formal comments on our rule change proposal, both oral and written testimony. We then revise our proposal in response to comments, resubmit it to the Joint Legislative Committee, and they hold a hearing. We revise the rules again in response to the comments we receive from the Joint Legislative Committee. At their hearing the public can testify, just as they could at ours and give them testimony. The difference is that then the Joint Legislative Committee provides us with comments and we respond to those comments to the Joint Legislative Committee. They hold a second hearing and at the end of the second hearing, they either approve the rules as revised, they issue final objections to the rules, or, if there is a real strong disagreement with the agency proposal, they issue a joint resolution which basically takes the rule making process away from the agency for the part of the rules where there is disagreement and submit a bill to the Legislature to adopt rules for the agency. That is rarely done. Usually what happens is at the end of this step, the agency adopts the rules either after approval by the Committee or after final objections. It is a three-step process and there are three hearings along the way and it takes about six months.

Comment: Anthony Zuena – A comment again on the issue of reclassifying B. The Town of Salem use the Class A designation as an underpinning to establishing a water resource protection district which directly bears on their land use regulations. I suspect that is not unique. I suspect that other communities that currently have Class A, have used that power to put in more stringent land use regulations. So the comment here is would be conscious of this change as potentially undermining the strength of these regulations. **Answer:** Paul – I don't think it does that. You could be right, but that would be through the source water protection program. I believe that source water protection areas which are tributary drainage areas, tributary watersheds, to public water supplies are allowed to develop more stringent land use protection irrespective of the surface water classification. That is wells for example. Source water protection areas can be designated around wells and those can have more stringent regulations. There is a process in the watersheds of public water supplies where actually the state can adopt rules on behalf of the public water supply. That would apply irrespective of the surface water classification as well.

Comment: Anthony Zuena – You could very well be right. It just occurs to me that we have to go back and look at the regs. to see how it is framed. The question I would ask now is if I understand the second part of this issue which is the whole issue of doing an antidegradation investigation and you make reference to 1708.03 and 08 in terms of framing the scope of work that has to be done. What concerns me about it is that it is vague. It would be very difficult to go to the Town of Salem or any other party for that matter, and say with any degree of confidence that this has a good chance of being a successful application. So, what do you envision the process to look like to clarify this scope expectation? **Answer:** Paul – Lets defer this discussion until we get to the specifics of the Salem

Case. Basically Salem gets to be a guinea pig is the short answer and it is vague. There are a lot of things that we just have not nailed down yet and that we will have to nail down in order to define it well enough for Salem to proceed.

Comment: Vernon Lang – Under the Nutrient are you proposing to delete phosphorus and nitrogen and can you explain to me why you are deleting that subsection? **Answer:** Paul – It is basically a statement that has not a lot of meaning. It is true anyway whether we say it or not. Existing discharges containing either phosphorus or nitrogen which encourage cultural eutrophication shall be treated to remove phosphorus or nitrogen to ensure attainment and maintenance of water quality standards. An existing discharge in order to get a permit is required to attain water quality standards. You cannot get a permit if the estimation based on whatever analysis is done. The results of that discharge would be that water quality standards would not be met. It is true anyway. Discharges have to meet water quality standards. That is true of permitted discharges as well as discharges that are not permitted, nonpoint sources. Water quality standards are required to be met. If there is a circumstance in which we determine water quality standards are not met, there is a defined process for determining what the source of the non-attainment is and then determining what needs to be done relative to that source in order to improve the situation so that water quality standards are met. That is the whole process of assessing waters and producing a list every two years of impaired waters. You cannot create a new discharge that would not meet water quality standards. If an existing discharge does not meet water quality standards, there has to be a study done and ultimately remedial action taken so that water quality standards are met.

Comment: William Beckwith – I agree that is inherent, that's to be the case, and then that statement in and of itself as written doesn't necessarily add anything. I am thinking back here now and whether we missed something, but of those kinds of statements on existing discharges to the lakes and ponds, some years ago before this stuff got into the standards, what they said is that existing discharges would not apply. They would be held in the highest level of phosphorus treatment that they could come up with at the time technologically. That kind of language has been put in standards basically because we didn't have a good handle on defining waterbody by waterbody and discharges to lakes. Did it get changed last time around. I assume that is the current language. **Answer:** Paul – The other aspect is that we have two of these. Franklin Pierce College and the Berlin Fish Hatchery. Franklin Pierce's permit is in process and Berlin Fish Hatchery the same thing. They both have issues with and they are both being worked on in the context of the TMDL program. It is not a generic issue there are two of them.

Comment: Ron Rayner – Bear in mind my underline assumption here is that I support your department's approach in this, but perhaps arguing on others name, this subsection subparagraph (c) that you want to delete, you said that it really doesn't say anything, because existing discharges have to meet water quality standards any where or they wouldn't be issued a permit. Yes, but how many of them, they all require general monitoring under conventional rules. I would say on average, not many require monitoring less than a flow a minute per second for nutrients, nitrogen and P. **Answer:** Paul – This is lakes and ponds and we have two. I know Franklin Pierce has in its permit. I don't think the fish hatchery has a permit.

Comment: Ron - That is right and the statement that you are deleting is not limited to lakes and ponds. So what I am trying to say is that we need to be sensitive, taking your logic, how many do we monitor nitrogen and for, not that many. But if we are not allowed to put any nutrients into the water that are "not naturally occurring", which is heresy anyway, then none of them will ever meet because everything is going to contain some form, some level, no matter how small, of nitrogen or. **Answer:** Paul – We are talking about that in our nutrients standards discussion. So, I would argue that the words do not mean anything and words that don't mean anything should be taken out.

Comment: William Beckwith – I would argue that they don't add anything beyond what is already encompassed in your standards, but at the same time taking this out still means you have to interpret

what adherence to nutrients means. It doesn't hurt to add it there. I think you would draw fire probably in taking it out.

Comment: Paul – Bill is right, it doesn't hurt to leave it in. I would argue for taking it out so that the standards become more concise, but if it is a hot button, we will leave it in.

Question: David Miller – How does this rule apply to emergency water transfers versus just a desirable water transfer for future growth? **Answer:** Paul – There is no such thing as an emergency water transfer. **Question:** David – Wasn't that the intent initially to help someone out in dire straights as a result of a drought and a drought condition that needed to bring some water? Isn't that what started the process? **Answer:** Paul – Yes. **Question:** David – How are we going to deal with that so called emergency water transfer down the road when maybe they don't have time for this antidegradation process to bear itself out that window might not be available for whatever reason? This is a hypothetical question. **Answer:** Paul – Emergency water transfers are not an option. Transfers are prohibited. **Question:** David – Drill wells into dry ground and hope for the best, what are those people going to do for drinking water? **Answer:** That is an issue for Salem to deal with. **Comment:** – That was the initiative originally and we have gotten away from that. If this drought did not end last year, we might be talking about a whole different issue right now. If it had extended longer, I think perhaps the rules somehow need to address the issue of short-term water transfers, if you don't want to use the emergency, maybe could use a different term. **Answer:** Paul – I think the legal situation, until we change the rules, is water transfers to lakes and ponds are prohibited and water transfers without a permit are also not allowed. The mechanism for overriding that is that the Governor can suspend things by proclamation.

Question: Vernon – Paul you made some minor word changes on nutrient subsections (d) and (e), could you explain to me what you were trying to accomplish there?

Answer: Paul – With (d) when I was talking about the two existing point sources to lakes or ponds the original proposal was to strike this out and it was pointed out that we really don't want to permit any new wastewater discharges to lakes or ponds. The intent here was not to do that and that has been very successful. There haven't been any new ones since the Clean Water Act. The existing ones have over time we have been working on making them go away. So the idea here is to allow one exception and that is for water transfers. **Comment:** Bill Beckwith – You have added point source. **Answer:** Paul – Right, which allows development in watersheds of lakes or ponds. Allows nonpoint source discharges to renew or increase. **Comment:** Bill – Right, so that is much more broad and sweeping than addressing your watershed transfer issues. **Answer:** Paul –Yes. **Comment:** Bill – That is stepping significantly backwards from the revisions that many years ago were established. Recognizing that we have our design dealing quantitatively with the nutrient issue especially in water below the flowing. You really are getting into more here than your allotted research.

Question: Marjory Swope – Is point source strictly necessary to what we are trying to accomplish, I am not sure it is? **Answer:** Paul – I think that it is in the context if you were to take that sentence literally, the way the rules read now, there shall be no new increase discharge of to lakes or ponds that would limit development in the watershed of a lake or pond. No new roads, no new developments, no new construction, no conversion of forest to agriculture, none of the things that would cause an increase in export from the watershed to the lake or pond. The logic behind adding point source is that the rules as they are now don't coincide with reality. It never was the intent of the rules, is not the desire of the Department, in the name of water quality, to stop development in watersheds, lakes or ponds. **Comment:** And it also was not used to try to manage such development, that you wouldn't say have measurable increase of. **Comment:** Paul – good point. We had discussed this internally and I will talk about it to the group. The appropriate way to deal with that issue is through antidegradation review. In fact the antidegradation review paper that you have, we have an internal draft which addresses the broader issue of possibility of doing antidegradation reviews on

developments that would result in significant increases in nutrients or other things, degradation of water quality. That is what we are thinking internally is that when we get to that point we would want to propose an antidegradation review process for those kinds of issues rather than an outright prohibition which doesn't seem to coincide with reality. In the broad scheme of things the antidegradation review process allows the people that care about that waterbody and that watershed to participate in a moderated public forum about the magnitude of the degradation which can be modeled relative to the social and economic justification for whatever the activity is that is going to cause the degradation.

Comment: Vern – Picking up on Bill's point here, we ought to have an UAA analysis upfront. It seems that if you went that route, people that live in these watersheds that would be effected would have no forum to discuss these issues before the laws or rules are changed and then not being in a position at the point of after the rules or statute has been changed trying to do it now on somebody's full head of steam trying to get a project through here with town involved. It just seems like the process is kind of stacking the deck, which is a strong term to use, but that is what it seems like to me. People having concern about having developed in watersheds where be it Salem, obviously have taken some time to institute a plan use controls. Seems like people in that watershed may well want to add this process upfront where they would have the opportunity to say well maybe this is okay, maybe it is not such a good idea. **Comment:** I think Bill's point about UAA is among the dynamic concerns raised.

Comment: Paul – UAAs is waterbody specific generally. **Comment:** Bill Beckwith – Yes, and it gets into a change in the use designation and criteria associated with it. It is often hard to separate. You wouldn't do a UAA to necessarily provide the ability to discharge some place where you wouldn't otherwise have the ability. Depends a little bit on how the actual state's standards are currently written, but agency for right or wrong has generally interpreted changes in what the state cares to entertain or not entertain from the discharge standpoint cannot in itself be one authorizing any discharge until they actually do and to be changing the use with the idea that discharges you could control them if you do allow such a use. That is sometimes debatable from a practical standpoint but that is interpretation.

Question: Ron Rayner – Paragraph (e) wouldn't you also need the word in there, except for water transfers the same as in (d)? **Answer:** Paul – I don't think so because (e) has the additional words *that would contribute to cultural eutrophication or growth of weeds or algae* where as (d) is an outright prohibition with the exception of water transfers.

Comment: Ron – You can argue that any transfer of water from a river to a pond has the potential to enhance cultural eutrophication. **Answer:** Paul – Right. And to actually use those words, we would have to quantify that. The presumption here is that there is some level of and nitrogen but that does not contribute to cultural eutrophication.

Comment: Marjory Swope – And Ron is suggesting that isn't so? **Answer:** Paul – Yes, you can interpret it either way. You can say one additional molecule of that isn't natural contributes to cultural eutrophication. Or you can say in a particular waterbody there is some threshold at which you will not get enhanced growth of weeds or algae.

Comment: Ron – Something like a net gain. The source water is a higher mass loading than the receiving water. Then someone could use this in perhaps to prevent oppose that transfer. I am looking at perhaps some clarification on net loads or there would be no net increase, something of that nature. **Answer:** Paul – You do have a point there. What aren't very functional words would contribute to cultural eutrophication remain in there.

Comment: Ron – One more stick of blue-green algae in someone's eyes is going to be cultural eutrophication. **Answer:** Paul – We define cultural eutrophication as the human induced addition of

waste containing nutrients to surface waters which results in excessive plant growth and/or decrease in dissolved oxygen. So cultural eutrophication has to result in excessive plant growth or decrease in dissolved oxygen.

Comment: Ron – It is subjective, it is all in the eyes of the beholder. **Answer:** Paul – Well excessive is easier to define for the current 305(b) report when we decided it was 25 micrograms per liter.

Comment: Ron – So there is some institutional framework by which to base this on.

Comment: Marjory – So you are proposing to add excessive to (e)? **Answer:** Paul – No. The definition of cultural eutrophication gets us there.

Comment: So, what are you saying that you propose leaving the words as they are because they are defined elsewhere? **Answer:** Paul – Right, because cultural eutrophication includes human induced addition that causes excessive plant growth. I think we can use that so that the one single molecule argument doesn't apply.

Question: Vern – Paul does this subsection (e) apply just to lakes and ponds that are not used in water supplies? **Answer:** Paul – It applies to all lakes and ponds.

Comment: Marjory – So the idea is to review every discharge for antidegradation. To go through the antidegradation review process for every one. Why are you pointing this out? **Answer:** Paul – Well for one these are existing words. We are just tinkering with existing words. And the idea is to continue basically the prohibition on new point source discharges to lakes or ponds containing and to maintain a fairly stringent level of restriction on any new or increased discharge to lakes or ponds including nonpoint source discharges. These words would give us some words on which to review new or increased nonpoint source discharges as well. The criteria being contribute to cultural eutrophication.

Question: Wendell Berry – Vernon your previous comments was that relative to the permit process under pressure of time? **Answer:** Vern – Among other things. We had the time and then once you get things down at the local level we have a tendency to get facts polarized, and at a higher lever, more generic level there is more of a free flow of ideas and discussions. That is what I was trying to get at.

Apparently they have been doing this under stress without system water process from which comes David's comment on emergency. Once this process is in place, will it then be possible for a water supplier (public or private) to go through the process of getting a permit in anticipation of need for discharge or receiving water such that it can be planned and not be an emergency and in so doing are there conditions under which it can become effective? And are there reopener conditions upon which change over time of either the discharging or receiving water may have changed be considered because there is an opportunity here to take away the emergency situation and provide for planning? That seems to be a positive thing if that would be permitted. **Answer:** Paul – That is true and if someone wants to transfer water and they go through the process of getting a permit, we change the rules, that permit would specify monitoring requirements, limits on chemical constituents and operational requirements and that permit gets reviewed every 5 years. So every 5 years, the situation will get reviewed again. **Marjory –** The permit would be a NPDES permit. **Paul –** Right.

Marjory – As chair of this august body, I think we have reached our time limit. **Paul –** I think that we would propose for the next step because we are getting down close to the point where we are going to propose some words for a rule change. E-mail us your written comments and suggestions and we will respond to those in a written way so you will know we considered your comment leading to a final draft before we actually initiate the rule making process. How about written comments by

the end of March. If we receive your response a few days after Monday, March 31st, we will not reject the comments. We will respond to comments in a written way and then we will propose a final draft.

William Beckwith – By any chance have you discussed the potential work load with regard to Salem finding out how to enhance there water supply. **Answer:** Paul – We have not. I think the practicalities of it is that Salem would desire to move as fast as possible with that and those folks that are already discharging, really don't care when we get around to it. We are in no big rush either. Manchester last year decided, after pursuing it for 10 years and doing engineering work, that they really didn't want to transfer water to Massabesic Lake, they wanted to build a treatment plant right down by the Merrimack River instead.

Comment: David Miller – That is good for the medium and larger utilities but the small utilities just don't have the means or process for that type of plan. Those are the ones that might find themselves in trouble and a need for a so-called emergency transfer. **Answer:** Paul – Right and there are a couple of those that have smaller systems that do transfer now. **Comment:** Those are the ones I worry about. **Answer:** Paul – The proposal here isn't to shut anybody down because they don't have a permit.

Antidegradation Rule for Addressing Water Transfers – Overview by Paul Currier

Again, I think I am going to skip over the background because we covered that somewhat last meeting and I think everyone has read over it. Basically we have one rule change here. This is on page 2 in the proposal section which is the operable part in which we would change 1708.09(e) in the antidegradation section we would add a statement that: *All point source discharges containing (P) to lakes or ponds shall be significant for the purposes of antidegradation review.* What the antidegradation review process does is create a process whereby any proposal for discharge that uses less 20% of the remaining assets for a particular pollutant of a water body does not have to undergo the full antidegradation review process with public input and formal consideration of social and economic justification relative to degradation of the water body. What these words would do would mean that any proposal for point source discharge containing in a lake or pond would have to go through the full process and the applicant would basically have to work with us to generate enough information so that the magnitude of degradation would be understood and then would also have to generate information relative to the social and economic justification, the need for the discharge. As Tony said, we don't propose changing any of the other language in the antidegradation part of the rules and that leaves a lot of procedural issues and nuts and bolts issues that are not addressed by the rules that we would have to work through in the process of doing a full antidegradation review. I believe I am correct that we have never actually done one, so that this is new territory. The proposal for that is basically that we sit down with the applicant and work out what information we need to make the review and that would be the process. I wish I could be more specific.

Question: Tony – Given the language in terms of what the scooping would look like and again thinking that assuming Salem is the community to come to the table first, would there be a willingness to do this in measured steps? The thought being that it would appear to me that at some point in the process along the way to making an intelligent decision, that this is never going to work, or okay so far so good, lets go to the next step. Trying to balance the degree of risk that any applicant would have to undergo in dollars without going all the way to the end and then getting the fatal letter that says sorry, no permit. **Answer:** Paul – Yes, I think so. To deal with the specific of Salem where we have a situation where for Canobie Lake is a water body that doesn't meet water quality standards, or actually doesn't meet water quality standards for excessive algae growth, but the causal parameter is P. We are going to need to do a TMDL, a load allocation for Canobie Lake anyway. The addition of the desire of Salem to transfer water means that the water transfer gets factored into the TMDL process. Basically as a part of your process of exploring the feasibility to transfer, we would do the

modeling study and include the transfer in the modeling study. There are other parameters, the antidegradation review for Salem, for instance, would involve the other parameters that are not for which Canobie Lake is a tier 2 waterbody. It is a waterbody that exceeds the standard and those are pH, turbidity, color and e-coli. Those would be the ones for Canobie Lake for which antidegradation would apply. Tony, I think that is the way we would do it. We would take it step by step and decide how we were going to proceed, document that, so that at each step of the way, Salem and others that are interested, would understand what the process is and what the next step is, and how the information that the applicant will be provided is going to be used. How we are going to use it to make decisions.

Question: Vern – Paul back to one of my earlier questions, when you delete 1708.12 (c) dealing with biological issues, say for example, your source water had species of fish in it, as usual flora and fauna associated with it, some rivers were beneficial to fish others were parasites or pathogens and this species of fish and that flora and fauna do not exist in Canobie Lake, how is the process going to work to ensure that you don't discharge water containing that organism and its associated flora and fauna to Canobie Lake and cause degradation in Canobie Lake? It seems like you would have to do a complete biological assessment of Canobie Lake and the source water to see what species of plants and animals live in both and then do an analysis to determine, well is there some species here that is an aggressive species that would come in and deplete the native flora and fauna in Canobie Lake and a change in species composition as a result. That seems to me like a pretty extensive limnological study and would probably take years. When you got done who knows what source of arguments would go back and forth between limnological exports, well this could be beneficial to that group, or what are you thinking. It seems like it is a very onerous sort of a concept to go through. **Answer:** Paul – I think the intent is that there would be an evaluation of biological characteristics. I thought that we would put that under antidegradation review. It might be beneficial to take those biological characteristics words and rather than delete them completely move them somewhere so that it is apparent that they do apply to transfers. For instance in Salem's case where there is an exotic species in Arlington Pond and there is not in Canobie Lake, they have engineering controls in order to prevent the introduction of exotic species to Canobie Lake. You can imagine similar situations for other species where you might not want to transfer organisms from one water body to another.

Comment: Vern – It would be hard to screen out eggs and larvae.

Answer: Paul – I guess in my mind it wouldn't be that complicated. Water gets transferred from one water body to another all the time. Rivers do that. I don't think the analysis would be excruciating in most cases.

Comment: Vern– I don't see how you can guarantee the result. Seeing these being testy situations and this opens up Pandora's box. I want this project to move forward and I have a lot of reasons here that will take you years to get to the bottom of. **Comment:** I am hearing a wide difference of levels of effort here.

Comment: Marjory – Well it is not clear from the language exactly what is intended. **Answer:** Paul – Well those words are proposed to be deleted. **Comment:** Marjory – Then there is some thought that perhaps they ought not be completely deleted. **Comment:** Wendell – I am not sure what you would gain. It seems like the suggestion is to delete them to make them go away, but you don't make them go away once you get over into your antidegradation. **Answer –** Paul – I agree, they don't go away. **Comment:** William Beckwith – Maybe I am not on the same page as you, where I see that language is in the antidegradation today. It is in the antidegradation portion that you are explicitly talking about transfers. **Answer:** Paul – You are right Vern has jumped from the subject here back to the deletion of the water transfer. The existing requirement that would go away is that the biological characteristics of the source water should be compatible with those of the receiving water. **Comment:** William Beckwith - Well that is in the antidegradation section. **Answer:** Paul – Thank you, so it would be fully considered when we do an antidegradation review. **Comment:** William – I

don't think it should go away any more than all the other things that would be flagged as things you would look at in the antidegradation where you have already done. I think a line item to remind yourselves that is one of the things that you review under antidegradation is appropriate. Now maybe it should be more of a general part of your antidegradation review and I think it is included here because there was thinking that went into this. This wasn't just completely without some reason. This was a kind of activity where biology was inherently something you could assume to be a component of the water you were going to be discharging so it was important to flag that issue here. You certainly have your programs in the state that are very concerned with that kind of issue. I think to not have it in there; I like it as in an item, is not the best. Since you already have it and talking about taking it out seems to me to be a step backwards. **Answer:** Paul – It only applies to transfers for public water supply. **Comment:** William – Well I wouldn't know that the concept only applied there, but it just so happens that the transfer of natural waters unlike a proposal from a metal plater, one of the key components of that water right off the start that you know you are going to deal with or not deal with is biology in the water. It is inherent to that kind of activity that is my concern and that is important.

Question: Bill Schroeder – Are you saying that on page 2 item 5(c) of this water transfer thing, talking about the biological characteristics of the source water and so forth, is proposed that would be deleted. That whole section. **Answer:** Paul – That is right. **Answer:** Bill – Should be part of the antidegradation review and by the taking it out sort of gives you the impression that it goes away but I don't think it does go away.

Question: Wendell –And it ought to be explicit somewhere? **Answer:** Bill – Yes, it can be put into general language and not in the antidegradation review.

Question: Vern – And when you put it in antidegradation what risk do you take to find the scope of work from a biological point of view and have to work long and hard to get that accepted or do you have a vague scope of work and then come back and ask question in the process of getting antidegradation done? **Answer:** Paul – I think practically speaking it is not a big deal. Mostly what we are talking about, microbiology, and that it would be fairly easy to identify other species over which there is concern and to have a study and debate about them. **Comment:** Bill – I have some constituents who would not agree. **Comment:** Vern Lang– I think there is a big question there. I can foresee a situation that would be relatively quiet, calm, and so forth and other situations where people have eye on the area and there are situations where some groups would want land development, and it is an area for holding out. On a national level it is a big deal. There are national programs set up now to make ships coming into Portsmouth discharge their ballast water out at sea, change it a couple of times so that they do not bring in organisms and discharge into Boston Harbor or into the Great Lakes or anywhere else. That is how we have got some of the really catastrophic situations with exotics like the zebra mussel being one of the recent ones that is impacting thousands and thousands of square miles of lakes and rivers in this country. It is a hot topic issue and don't be surprised if people jump on it. **Answer:** Paul – I think the questions is whether the language in the antidegradation review adequately covers that so that it can be brought up, considered, or whether we should have explicit language somewhere.

Comment: Marjory – Well you have on page 36 under 1708.09 (b)(6) Potential Distress Incident Biological Resources such as indigenous species, rare species, which assumes that you would evaluate them and have a requirement to do that. **Answer:** Paul – I don't think that is enough because that is the criteria by which the department would determine that something is specifically significant. **Marjory –** But that assumes that you have done some sort of a study though. **Paul** - Not necessarily.

Comment: Tony – As I understand it that whole section comes out of play because the determination was presumptive that it is significant. **Answer:** Paul – Right, we have already made that determination and we will make it by rule, we will not have any discretion for transfer to lakes or

ponds. **Comment:** Tony – It would seem virtually impossible to lead to the conclusion that there is no degradation with what we know about the difference in water quality. My understand then is that there can be some degree of degradation per minute if it can be demonstrated that social and economic benefits out weight that degree of degradation. Is that a correct assumption? **Answer:** Paul – Right. I think for some constituents and again since we haven't done one, we don't know. For instance, for color where you could argue that a different color or a higher color number is not necessarily degradation, that it is not always true that more color is a degraded condition from less color.

Comment: William Beckwith – How does that play out. I realize there is a paper reference to check but is there judging criteria as to whether environmental degradation can be offset by the other issues? **Answer:** Paul - Yes and one of the references is that EPA has a guidebook on how you go through and you couldn't just take it and apply it cookbook fashion, but there is a guidebook that sets the criteria about how you go through this social and economic justification process. It is fairly rigorous. **Comment:** Tony – The reason why I raised the point, if I follow Vern's line of questioning, it would be impossible. I state that in matter of fact it is impossible to make a firm statement that says no degradation will occur. There will always be the what if, what if. So accepting then that some degree of degradation will occur as the result of the transfer, as I understand the way this is proposed, you would then precede to an investigation of economic and social benefits and at some level, if it can be demonstrated that benefit out weighs some degree of environmental degradation. **Answer:** Paul – With respect to Canobie Lake, antidegradation review is done on a parameter-by-parameter basis and the significance determination is also done on a parameter-by-parameter basis. The effect of the rule change in the antidegradation section would be to make the discharge significant for not necessarily for the other parameters that we are concerned with. That decision would be made by DES based on the information that we have available to us. **Comment:** Bill – the precedent is already set that by virtue of the determination, the preexisting assumption that the transfer is significant just because of the issue alone. You have already made that assumption.

Comment: Steve Clifton- If you do get into a use attainability analysis, you are probably talking years before that gets answered. So I guess I see a need for, I guess I want to use the word emergency, but if you are trying to get emergency water for I guess a fast permit use attainability, just the science and the alternatives and the public commenting period, is going to take years.

Comment: Bill – The last part of your comment is true, you are reviewing those alternatives, and doesn't lend itself well to an emergency situation.

Comment: Ron Rayner – Paul how about tying this proposal on antidegradation, rather than stating why, check that all discharges shall be considered to tie in with the significant and insignificant determination of the water quality standards. Tie it in to the 20%. If we are going to one receiving stream to another receiving truly a stream, we probably can come up with an assimilative capacity. Going from a receiving stream source water to a pond or a lake would be more difficult to come up with assimilative capacity. But we do have a definition of cultural eutrophication right George, and definition so then we can use that numerical guide as a means to judge as to whether or not it will be in that increase above this certain level to potentially enhance the cultural eutrophication. **Answer:** Paul – Well I think the idea, again this doesn't apply to Canobie Lake because it is an impaired water, but the idea is where you have a lake or pond that is better than standards. It is good. It has a low concentration, and there is a proposal to transfer water that would introduce, you want that to be significant, by definition, by rule. You don't want the agency to have discretion about what the simulative capacity is, you want the agency to have to do an antidegradation review on transfers to lakes or ponds which is all transfers. You want to enforce that issue. That is the whole idea here to force that issue. Because lakes and ponds have always been considered to need protection against discharges that is kind of the starting point, you don't want any new point source discharges to lakes and ponds. We are making an exception. Maybe there are some cases where water transfers to lakes or ponds are a good idea even though we are introducing P. We want to go through the full

antidegradation review because of this long-standing precedent for not allowing any discharges to lakes or ponds. We do not want to give the agency any discretion. We do for other antidegradation things but not for this one.

Question: David Miller – Could there be a situation where you would grant some conditional maybe under emergency conditions so that they can do the transfer but they must set some timeframe to complete the antidegradation and complete any engineering or mitigation procedures? **Answer:** Paul – I don't think so. You cannot get a permit unless you meet water quality standards and antidegradation is part of the water quality standards. So antidegradation is required, you have to do it before you get the permit.

Comment: If you are going to the legislature, why don't you go for the whole enchilada? If you are going to go for these 11 waterbodies and he is on to something, there is going to be an instance down the road when a community is not going to have the prerogative of time and there ought to be perhaps full approval of the state agency, DES, that this constitutes an emergency and therefore a temporary permit is allowed until whatever. **Answer:** Paul – If there is a true emergency, and there are cases where there are true emergency, the Governor can always declare an emergency and the rules don't apply and whatever needs to be done to mitigate the emergency can be done. **Question:** What is the practicality of that happening? **Answer:** Marjory – That particular bit of statute passed last year on the theory that it would be faster than the rigmarole that Salem went through. Is that not correct? **Answer:** Paul – Actually I think the governor has always had power to declare emergencies and to suspend agency rules in order to mitigate the emergency. **Comment:** William Beckwith – Recognizing to the extent that overlaps with possible federal regulations and statute, people may be liable for lawsuits, or whatever. **Comment:** Marjory – Didn't EPA decide that there were no emergencies? **Answer:** William Beckwith – Well I don't know, I just felt obligated to speak up because the Governor might say sure there is an emergency and you can discharge your water, but that discharge is subject to a federal permit and one doesn't exist. **Comment:** Paul – I think we are scaring ourselves here. The fact is that the antidegradation process that is described in the federal regulations, if you read it and you read it literally, you need full antidegradation review for any, if a waterbody is above standards, the water quality is better than standards, an antidegradation review needs to be done for any discharge, point source, non point source, it doesn't matter, that would result in a lowering of water quality. I don't know anywhere in the nation where that has been applied literally. The problem is because antidegradation steps are not spelled out, the process is not well defined, it can easily balloon into something that takes forever and never gets to an end point. I think what we are envisioning here is to change the rules to allow the antidegradation process to go forward recognizing that we are going to be defining how we do it as we go. The intent is not to enter into a process that has no end point, but to enter into a process where we do in fact quantify the degradation somehow, what is going to be degraded and what does it mean and we quantify the benefits. Why is this discharge necessary, why is it better than other alternatives, and why ought we to do it for social and economic reasons, and to do that in a public forum. We may get bogged down. We are not defining it and we are not trying to define it in the rules sufficiently so that we eliminate the possibility of getting bogged down. The intent is to modify the rules so that we can try it.

Salem Water Works – Canobie Lake Transfer

Comment: Paul – There was a point that I was not clear on and I believe the wording is still ambiguous. If we determine a point source discharge containing to a lake or pond and if the rules say it is significant for the purposes of antidegradation review, if it is significant because it contains is it significant for all parameters? **Comment:** Are you acknowledging from the very step of entering into the process, that there will be degradation? **Comment:** Paul – Although it didn't explicitly state it in the discussion specific to Salem, my assumption was that it would not be an automatic significant determination for the other parameters. The Department for the other parameters would go through the process of determining significance for the other parameters. In fact that would be an early step in the process of considering Salem's application where we would go through pH, turbidity, color, e-coli

and we would tell Salem and the Canobie Lake Association whether we are going to do full antidegradation review for those parameters. We are not going to do it for because Canobie Lake is on the impaired waters list. It has no assimilative capacity left. **Comment:** Marjory – Isn't that what you said, it sounded to me as if you had to go through for everything and that is the question. **Answer:** Paul – That is the question. The question is which way do we want it. **Comment:** Why not submit the limnological study, backup water quality data, by the applicant making a case, yes it is significant or it is not significant for your review and concurrence. **Answer:** Paul – Right, that is the questions. Do we want to give the agency discretion for other parameters besides. **Comment:** Well that is to me more middle of the road approach than making a determination that everything is going to be subject to it. **Comment:** Marjory – But I don't think that is what they *meant* to do. **Comment:** Well that is the question. **Comment:** Paul – The intent was to remove agency discretion for P only, and to leave the discretion for the other parameters. **Comment:** Marjory – I think that needs a little revise in wording. **Comment:** In further clarification on that point, going back again to comment Vern made earlier – if the determination is significant and limited to the case of Salem which dealt with - color, turbidity, pH, and e-coli, what about the biological integrity, where does that come in to play? It seems implicit to me if you look at the scope under 1708.03 that all that would come into play but I am not hearing that right now. **Answer:** Paul – I think you are right. I think it would. We would go down through that list. **Comment:** William Beckwith – The big difference between insignificant and significant is finding that lowering the water quality is necessary. Once you find that it is both necessary for social and economic development is that an individual evaluation for each and every parameter or is it such that you can do it once regardless of what else is associated with it, you have to do it. I think at that phase the answer is if you have got to do it, you have got to do it. **Comment:** Paul – What your saying is the discharge is significant, it doesn't matter what the parameters are. If it is significant, it is significant and you do social and economic justification versus the degradation. **Comment:** You have some freedom beyond that to kind of decide how important other parameters are significant to you with regard to how well you deal with that. It is important to note that if you could have several parameters that in and of themselves could trigger this being a significant discharge, they wouldn't necessarily all have to be nutrients.

Comment: Paul – It sounds like and moving to the specifics for Salem which should be fourth, mislabeled 2 down at the bottom, if we use that approach and I think I would leave the words the same that the proposed transfer to Canobie Lake is significant because it contains. The fact that Canobie Lake is an impaired water for doesn't remove that provision. So it is significant, you still have to do the antidegradation review even though it is impaired water for. Does that sound right?

Comment: Bill Schroeder- This is the kind of situation that confuses the matter. Suppose just in general that you are considering transferring water to a lake and is fine, so you will have to do a full antidegradation review for P, so that means you will have to determine what the assimilative capacity of lake is and how much is in there now, and how much you are going to move in and so forth and so on. Also means that you would need to do an economic study to explain why this project is beneficial enough to be, etc. etc. You are also going to have to do an alternative analysis that says we have looked at everything else we could do, and so forth. Those I think are the two big expensive things. The thing that was an issue here is well what about other parameters other than P which might be pollutants. For each one of those according to the rules, you would either have to determine if it is significant or not significant to determine how far you are going to go into that. But to determine how significant or not, you would have to know well does the addition of this pollutant (b) eat up more than 20% of the assimilative capacity of the lake. You have to have some evaluation of the assimilative capacity of the lake for (b) and so it doesn't seem to me that once you are in to doing a full antidegradation review just for P adds much to the process to do the review for all parameters.

Comment: When you are over the 20%, your alternative at making the difference would be limited to your alternatives analysis. Now you would have to look at your alternatives analysis for not just and what it would cost to minimize or eliminate the addition of P but is significant for other parameter like say copper or metals or bacterial or whatever. You would have to look at those and if

they were bumped above the 20% your alternatives analysis would have to look at each one of those and determine whether you could realistically minimize or eliminate that degradation from that particular pollutant while at the same time maybe allowing the addition of over 20%. I think what happens is in general you are going to do a social and economic benefit. I think no matter what it is, it is going to be done for everything. When you get into the detail, it is looking at each individual parameter and saying how can I minimize this, especially if it is over the 20%. I think that is where the difference is.

Comment: When you have to do it is over the 20%. The only distinction is who determines whether it is over the 20% or not whether it is significant or not. **Answer:** Paul – The agency does that. We document it, and it is not widely publicized but there is documentation when we do that for a new permit or an increased one. There is a computation assimilative capacity and so on.

Comment: William Beckwith -I think you were hitting on the point up front though, it is not just the matter involving the 20%, can I allow that or not. You have to determine that there is assimilative capacity to handle the addition in the first place. In the Canobie Lake situation, you really don't have the situation where you have to do the classic antidegradation review. You don't have room to degrade. Your analysis is around how you are going to essentially approve more in there with a new source, reduce the load from something existing, so you have room for that. But you are not talking about some increment of reserve capacity. Is there room to allow degradation for other parameters such as toxic elements through what other people have already allocated whether it is deliberate or just through the fact there is nonpoint source. That is why if you really think through this process you are not just talking antidegradation as some separate animal, you are talking about analysis of load allocation and essentially the TMDL process which is part of this whole deal that needs to be considered not in the context of the 303(d) listing but how much can a waterbody handle, what is the current loadings to it. Is there room for more loading? It is not an easy thing not just because of antidegradation.

Comment: Vern – To add to that it would seem like, Paul has a note here, a couple of non-conventional parameters to allow transfer of exotics or parasites or whatever else into waterbodies, so I can see why that issue could involve some original thinking.

Answer: Paul – For the purpose of rule changes, I think what we want to do is an antidegradation review for the Salem situation. Take away the fact that Canobie Lake is on the impaired waters list, we would go through a full antidegradation process, and a social and economic justification would be the same no matter how many parameters you are considering. We probably would want to go through an analysis pretty much parameter by parameter as to what the effect is going to be on the receiving waterbody. The intent here is that we do antidegradation reviews for point source discharges to lakes or ponds. Maybe we take out the proposed words in 1708.09(e) the words ***containing*** *so* that it would read ***all point source discharges to lakes or ponds shall be significant for the purposes of antidegradation review***. That may remove the ambiguity. If you have a discharge, it is significant.

Comment: And that would be because you are moving it to a water supply? **Answer:** Paul – To a lake or pond. **Comment:** If this goes through as you just enunciated then they all would be considered significant. They will have to be evaluated. Who will do the evaluation, the applicant, and the state? **Answer:** Paul – The applicant provides information, the state conducts the public forum and then does the evaluation. **Comment:** So the applicant, as I always thought, would really have to present a study anyway. **Answer:** Paul – Right. The burden is on the applicant. **Comment:** I don't see the benefit of having the other parameters: pH, color, turbidity, perhaps e-coli might be arguable point, but doing that assessment, the condition under which one does this sampling regiment on both the source water as well as the receiving water, trying to pull in nonpoint source loads and storm water runoff, is just going to be phenomenally complex. I just think that it should not be automatically thrown in there. The bottom line comes down to the alternatives analysis and should be

tied into the 20% factor. As difficult as that would be, some credible means needs to come up and be established to determine if it is more than 20% for these other parameters other than. If significant it is triggered in and you must evaluate it from A to Z, but if it is not then let it be because the alternatives analysis is going to be really what imposes a higher cost on the community if it is above the 20%.

Answer: Paul – I think we just talked ourselves in to the other way around. **Comment:** Marjory – Yes, we did. **Answer:** Paul – Because of the value of lakes or ponds, any discharge is significant and warrants an alternatives analysis, a social and economic justification and all the costs that go along with it. **Question:** Any discharge from transfer of water or any discharge period? **Answer:** Paul – Point Source.

Comment: Paul – Are there any other issues relative to Salem and Canobie Lake water transfers that we haven't talked about?

Other Business – Paul Currier

EPA Concurrence List – Everyone received this in their packet and it is for information. Basically EPA has concurred with our nutrient criteria plan and we will be proceeding with that.

Flow Based Permits – We dealt with this early on in the life of the Water Quality Standards Advisory Committee. We dealt with that, there was a presentation by the City of Keene and we put it on hold. The situation has come up relative to Jaffrey's NPDES permit application and review. We would like to bring that issue back up again and propose some rule changes to allow dynamic modeling for the purposes of setting permit limits in the water quality limit segments in addition to the traditional method of steady state modeling at average daily flow discharge and average parameters in the treatment plant discharge in 7Q10. If we set a meeting date in a month, we will be able to get you some read ahead information on that so that you can consider it. This is another one that has a time line that is driven by the fact that we are trying to write a permit for Jaffrey and we cannot do it.

George to make sure that Jaffrey knows about our next meeting.

Future Meeting Dates and Times

Tuesday, April 8, 2003 1:30 pm – 4:00 pm at NH Fish & Game, East Side Conference Room.

The meeting adjourned at 3:55 PM